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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/820,648      | 03/30/2001  | David W. Cannell     | 5725.0843-00        | 3537             |

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EXAMINER

VENKAT, JYOTHSNA A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1615

DATE MAILED: 08/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/820,648

**Applicant(s)**

CANNELL ET AL.

**Examiner**

JYOTHSNA A VENKAT

**Art Unit**

1615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-157 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-157 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-15 (all in part), 16-23, 25-28 (all in part), 29-31, 32-63 (all in part), 64-71, 73-76 (all in part), 77-79, 81-101 (all in part), 102-109, 111-117, 118-135(all in part), 136-143, 145-148 (all in part), 149-151, and 152-167 (all in part) are drawn to composition, method of use and kit wherein the at least one compound is C5-C7 monosaccharides substituted with at least one amino group, classified in class 424, subclass 70.1.
  - II. Claims 1-15 (all in part), 24, 25-28 (all in part), 32-63 (all in part), 72, 73-76 (all in part), 80-101 (all in part), 110, 118-135(all in part), 144, 145-148 (all in part), and 152-167 (all in part) are, drawn to composition, method of use and kit wherein the at least one compound is polymers comprising at least C5-C7 monosaccharides substituted with at least one amino group, classified in class 424, subclass 70.1.
  - III. Claims, drawn to 1-15 (all in part), 25-28 (all in part), 32-63 (all in part), 73-76 (all in part), 81-101 (all in part), 118-135(all in part), 145-148 (all in part), and 152-167 (all in part) are drawn to composition, method of use and kit wherein the at least one compound is glycoproteins comprising C5-C7 monosaccharides substituted with at least one amino group classified in class 424, subclass 70.1.

The inventions are distinct, each from the other because of the following reasons:

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2. Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the groups have different functions because group I is drawn to monosaccharides which is distinct and separate from Polysaccharide of group II. Group I is a monomer and group II is polymer. Both the groups are not related and art anticipating or rendering obvious monomer will not anticipate or render obvious a polymer.

3. Inventions I and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the groups have different functions because group I is drawn to monosaccharides which is distinct and separate from glycoproteins of group III. Group I is a monomer and group III has two components, which are glycoproteins, and monomer of group I. Both the groups are not related and art anticipating or rendering obvious monomer of group I will not anticipate or render glycoproteins of group III.

4. Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the groups have different functions because group II is drawn to polysaccharide, which is distinct and separate from glycoproteins of, group III. Group I is a polymer and group III has two components namely glycoproteins and monomer of group I. Both the groups are not related and art anticipating or rendering obvious monomer of group II will not anticipate or render glycoproteins of group III.

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5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

#### **ELECTION OF SPECIES**

6. If applicants elect group I they are further required to elect a single disclosed species.

7. This application contains claims directed to the following patentably distinct species of the claimed invention:

1. C5 monosaccharides substituted with at least one amino group
2. C6 monosaccharides substituted with at least one amino group
3. C7 monosaccharides substituted with at least one amino group
4. Imine derivatives of C5 monosaccharides substituted with at least one amino group
5. Imine derivatives of C6 monosaccharides substituted with at least one amino group
6. Imine derivatives of C7 monosaccharides substituted with at least one amino group
7. Hemiacetal derivatives of C5 monosaccharides substituted with at least one amino group
8. Hemiacetal derivatives of C6 monosaccharides substituted with at least one amino group
9. Hemiacetal derivatives of C7 monosaccharides substituted with at least one amino group
10. Hemiketal derivatives of C5 monosaccharides substituted with at least one amino group

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11. Hemiketal derivatives of C6 monosaccharides substituted with at least one amino group

12. Hemiketal derivatives of C7 monosaccharides substituted with at least one amino group

13. Oxidized derivatives of C5 monosaccharides substituted with at least one amino group

14. Oxidized derivatives of C6 monosaccharides substituted with at least one amino group

15. Oxidized derivatives of C7 monosaccharides substituted with at least one amino group

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently claims 1,44,92,130,and 164 are generic.

**Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added.** An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims

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are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

#### **ELECTION OF SPECIES**

8. If applicants elect group II they are further required to elect a single disclosed species.
9. This application contains claims directed to the following patentably distinct species of the claimed invention:
  1. Polymers comprising at least one C5 monosaccharides substituted with at least one amino group
  2. Polymers comprising at least C6 monosaccharides substituted with at least one amino group
  3. Polymers comprising at least C7 monosaccharides substituted with at least one amino group
  4. Polymers comprising at least Imine derivatives of C5 monosaccharides substituted with at least one amino group
  5. Polymers comprising at least Imine derivatives of C6 monosaccharides substituted with at least one amino group

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6. Polymers comprising at least Imine derivatives of C7 monosaccharides substituted with at least one amino group
7. Polymers comprising at least Hemiacetal derivatives of C5 monosaccharides substituted with at least one amino group
8. Polymers comprising at least Hemiacetal derivatives of C6 monosaccharides substituted with at least one amino group
9. Polymers comprising at least Hemiacetal derivatives of C7 monosaccharides substituted with at least one amino group
10. Polymers comprising at least Hemiketal derivatives of C5 monosaccharides substituted with at least one amino group
11. Polymers comprising at least Hemiketal derivatives of C6 monosaccharides substituted with at least one amino group
12. Polymers comprising at least Hemiketal derivatives of C7 monosaccharides substituted with at least one amino group
13. Polymers comprising at least oxidized derivatives of C5 monosaccharides substituted with at least one amino group
14. Polymers comprising at least oxidized derivatives of C6 monosaccharides substituted with at least one amino group
15. Polymers comprising at least oxidized derivatives of C7 monosaccharides substituted with at least one amino group

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently claims 1,44,92,130,and 164 are generic.



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**Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added.** An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

### **ELECTION OF SPECIES**

10. If applicants elect group III they are further required to elect a single disclosed species.

11. This application contains claims directed to the following patentably distinct species of the claimed invention:

1. Glycoproteins comprising at least C5 monosaccharides substituted with at least one amino group

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2. Glycoproteins comprising at least C6 monosaccharides substituted with at least one amino group
3. Glycoproteins comprising at least C7 monosaccharides substituted with at least one amino group
4. Glycoproteins comprising at least Imine derivatives of C5 monosaccharides substituted with at least one amino group
5. Glycoproteins comprising at least Imine derivatives of C6 monosaccharides substituted with at least one amino group
6. Glycoproteins comprising at least Imine derivatives of C7 monosaccharides substituted with at least one amino group
7. Glycoproteins comprising at least Hemiacetal derivatives of C5 monosaccharides substituted with at least one amino group
8. Glycoproteins comprising at least Hemiacetal derivatives of C6 monosaccharides substituted with at least one amino group
9. Glycoproteins comprising at least Hemiacetal derivatives of C7 monosaccharides substituted with at least one amino group
10. Glycoproteins comprising at least Hemiketal derivatives of C5 monosaccharides substituted with at least one amino group
11. Hemiketal derivatives of C6 monosaccharides substituted with at least one amino group
12. Hemiketal derivatives of C7 monosaccharides substituted with at least one amino group

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13. Glycoproteins comprising at least oxidized derivatives of C5 monosaccharides substituted with at least one amino group

14. Glycoproteins comprising at least oxidized derivatives of C6 monosaccharides substituted with at least one amino group

15. Glycoproteins comprising at least oxidized derivatives of C7 monosaccharides substituted with at least one amino group

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently claims 1,44,92,130,and 164 are generic.

**Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added.** An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the

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prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

12. Due to complex restriction requirement, telephone call was not made to the applicants.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).


13. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JYOTHSNA A VENKAT whose telephone number is 571-272-0607. The examiner can normally be reached on Monday-Thursday, 9:30-7:30:1st and 2nd Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THURMAN K PAGE can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**JYOTHSNA A VENKAT**  
Primary Examiner  
Art Unit 1615

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